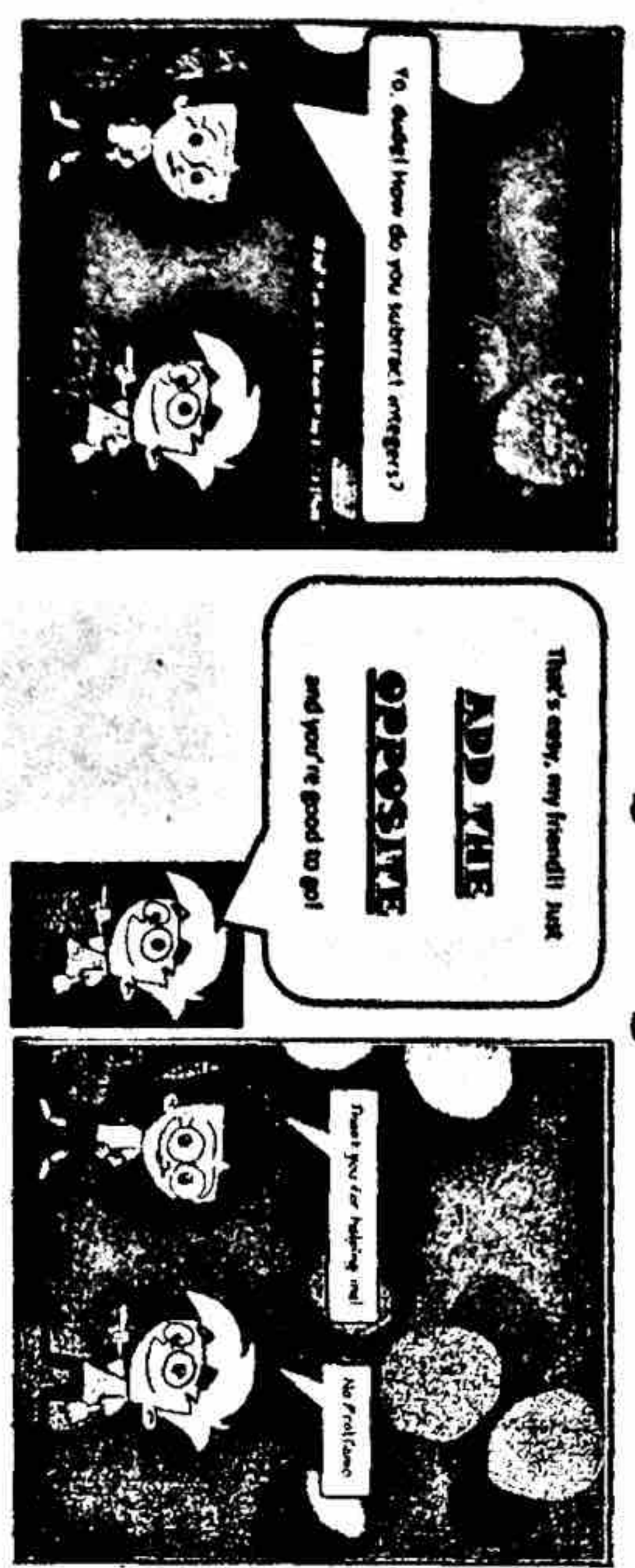


Subtracting Integers



Example 1: Subtract $5 - (-8)$ → Instead of subtracting -8, ADD positive 8

$$5 + 8 = 13$$

Example 2: Subtract $-3 - (4)$ → Instead of subtracting 4, ADD negative 4

$$-3 + -4 = -7$$

Example 3: Subtract $-7 - (-2)$ → Instead of subtracting -2, ADD positive 2

$$-7 + 2 = -5$$

★ **Why does this work??** Take a look at the visuals below: ★

Using a number line:

$$2 - (-3) =$$

If you were subtracting 2 - 3, you would start at 2 and move back 3. But since you're subtracting a negative 3, you'll do the opposite!!



$$2 - (-3) = 2 + +3 = 5$$

Using counters:

$$5 - (-3) =$$

Begin with 5 positive counters. You don't have 3 negatives to take away, so you must add in enough zero pairs to be able to take 3 away. That leaves you with 8 positives!!



$$+5 - (-3) = +8$$

*Subtraction changes the direction of the 2nd number

Subtracting Integers Practice

For #s 1-4, illustrate the subtraction on a number line.

1) $3 - 5 =$ _____



2) $-1 - 1 =$ -2



3) $-2 - (-2) =$ 0



4) $3 - (-2) =$ 5



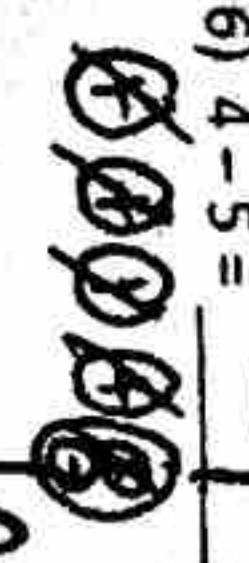
For #s 5-8, draw counters to illustrate the subtraction. Remember to use zero pairs if needed!

+ → Positive
- → Negative

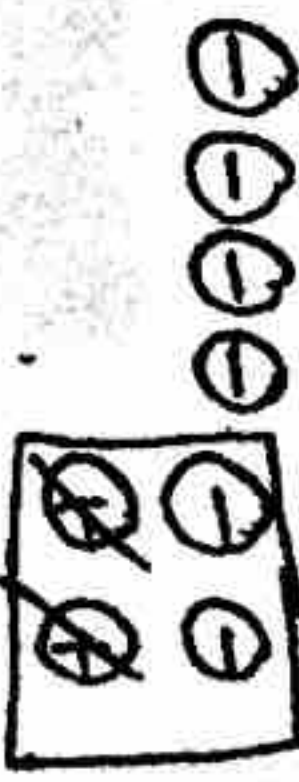
5) $-2 - (-1) =$ -1



6) $4 - 5 =$ -1



7) $-4 - 2 =$ -6



8) $3 - (-3) =$ 6



Evaluate the following problems:

- | | | |
|------------------------------|---------------------------------|------------------------------|
| 9) $14 - 15 =$ _____ | 10) $-3 - (-4) =$ _____ | 11) $0 - (-6) =$ _____ |
| $14 + (-15)$ | $-3 + 4$ | $0 + 6$ |
| 12) $-52 - 4 =$ _____ | 13) $-86 - (-86) =$ _____ | 14) $13 - (-10) =$ _____ |
| $-52 + (-4)$ | $-86 + 86$ | $13 + 10$ |
| 15) $3 - 8 =$ _____ | 16) $-16 - (-16) =$ _____ | 17) $0 - 4 =$ _____ |
| $3 + (-8)$ | $-16 + 16$ | $0 + (-4)$ |
| 18) $-6 - 8 + (-32) =$ _____ | 19) $45 + (-30) - (-5) =$ _____ | 20) $-912 - 4 + -16 =$ _____ |
| $-6 + (-8) + (-32)$ | $45 + (-30) + 5$ | $-912 + (-4) + (-16)$ |

Remember! When you subtract integers, you...

Keep-Change-Change

3 - 5
3 + -5
-2